10.8.07: Lt. Governor Garamendi's Lecture at the Chinese University of Hong Kong

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October 8, 2007

Thank you very much for the kind introduction. I am honored to visit this vibrant city and to talk with you about our common challenges and our shared obligations.

May I ask a question of all of you to start this discussion? Do you believe that humans are adding significant amounts of greenhouse gases to our atmosphere?

And one more question; do you believe greenhouse gases are causing our climate to change?

I, for one, am convinced that global warming poses the most significant challenge our species has ever faced. And I believe that if we do not meet this challenge immediately and boldly, the effects of climate change will overwhelm every aspect of life on this planet.

As many of you witnessed firsthand, the tremendous storms this past June that killed hundreds and displaced many of your citizens across the country. Weather patterns will only continue to bring about more devastation and economic ruin.

Drought, famine and global conflicts that could result from global climate change will make all other government agendas irrelevant.

I imagine many of you have heard of Al Gore's book, or seen the movie "The Inconvenient Truth." And while many people, because of the efforts of Al Gore and others, are just waking up to this issue; like Al Gore, I've been working on energy issues for decades.

During the energy crisis of the 1970's as a California lawmaker I authored laws that provided significant tax reductions for energy conservation, and for wind and solar energy development.

During the Clinton Administration, I had the honor of serving as Deputy Secretary of the United States Department of Interior, America's land and resource agency. One of my chief duties was to help develop the American Agenda for the Kyoto Climate Change Conference.

Despite the great efforts of President Clinton and Vice President Gore, The United States Senate did not ratify the Kyoto treaty. I deeply regret this lack of foresight by the Republican Senate because in my state of California we are already experiencing the effects of climate change.

We have seen the ocean level at the Golden Gate, the famous entrance way to California, rise six inches in the last 100 years. We anticipate that the Pacific Ocean along our coast will rise nearly a half meter, within the next 20 years. A sea level rise of that magnitude will create extraordinary problems for our state, and for your country, too.

Like the U.S., China has thousands of miles of coastline. Major industrial, residential, energy production and transportation resources along these coastlines are threatened by rising sea levels.

Global climate change threatens grain production in both of our nations - and we are two of the three largest grain producers in the world.

Our countries face water shortages that challenge our ability to continue to feed the world's population, as water tables fall and wells dry up in important farming areas.

This winter was the fourth driest on record in my home state. In and era of reduced water supplies can California continue to share its agricultural bounty with the rest of the world?

The snow pack in California's Sierra Nevada Mountains - the source of much of the State's drinking water -- is less than

half of normal this year and is expected in future years to be 30% to 70% less. In the great Everest Mountains the Rongbik and Mingyong glaciers that feed your mighty rivers continue to shrink. What does this mean for China's water supplies?

How did we arrive at this environmental precipice? The answer is found in the energy choices made by all societies on this Globe.

America, my country, has for many years been the principal problem. America as the largest energy user in the world on a per capita basis, consumes far too much of the world's energy. But now China may surpass the U.S. in overall energy consumption, requiring a brand new power plant every 7 to 10 days.

As a result, our nations are the world's two largest emitters of greenhouse gasses.

During my twenty four hour stay in Hong Kong each of our nations will emit close to 17 million metric tons of carbon dioxide. My state of California will emit 1.5 million metric tons during that same time period. California remains today the second-largest state emitter of greenhouse gases, only behind Texas. I assure you I am not proud of this fact.

If we are to reverse the threat of global warming, we must curb our consumption of carbon fossil fuels, and move our economies to improved conservation, greater efficiency in power production, the substitution of renewable fuels, wind, solar, wave and others for coal and oil.

While it is accurate to say that developed nations squandered the atmosphere in their pursuit of affluence and modern economies, it is equally accurate to say that every society and economy will be harmed by the climate crisis. Therefore, every society and nation must participate in the solution. We must develop procedures that allow and cause all economies and societies to do their proportionate share in reducing emissions.

Since China and America are the world's leading emitters of greenhouse gasses, our countries must reduce their emissions sooner and more drastically than developing nations with smaller emissions.

Nations correctly criticize the United States for not addressing the Climate Crisis. The current policies of the Bush administration are wrong. Until six months ago President Bush and his administration denied that there was a problem. Only when California's Republican Governor Arnold Schwarzenegger took up the cause of Climate Change did President Bush begin to address the issue.

I assure you that when we elect a new president next year climate change legislation must and will be among the highest priorities. It is my hope that the Democrat Party and our new Democrat President will join the nations of the world in a morally correct response to the Climate Crisis, and we will enact policies to vigorously address this crisis.

I regret that my country did not act sooner to respond to the growing threats of climate change. But as a Californian, I am proud that my state is well on the way to following the examples of European Countries and other signatures to the Kyoto Accords.

California has committed to decrease its carbon emissions to 1990 levels by the year 2020. This is a reduction of approximately 25%, more than 174 million metric tons each year.

We have already put in place regulations that will reduce CO2 equivalents by 30 million tons. The Chinese proverb is that a journey of a thousand miles begins with the first step. California has begun the journey.

I am optimistic that these efforts will not stifle our economy but will rather help it grow. Investments in energy efficiency will save valuable energy resources and reduce cost. The necessity to comply with current and future regulations is already fostering astounding innovation and investment in research, design and manufacturing.

Jobs will grow as we adopt new green technologies and invest in zero waste strategies. Future jobs will be green jobs.

The University of California estimates that California's commitment to reduction in greenhouse gases will translate into new green technologies, jobs and income gains for Californians.

In 2020, we can expect an additional increase of 83,000 jobs and \$4 billion in income, above and beyond normal growth.

Laws and regulations are necessary, as is the enforcement of those laws and regulations. But alone they will not suffice. The power of the market place must be harnessed with financial incentives and rewards for reducing greenhouse gasses.

For example, in less that 10 years, Germany achieved a remarkable transformation from almost no renewable energy to more than 20% of is energy supply from solar and wind.

Those results came from a government policy that established a 20 year guarantee that energy from renewable sources would be purchased at a profitable price. Investors were assured a reasonable return on their money. Entrepreneurs, big and small rushed to install solar and wind systems. As the subsidy continues, Germany will soon get 30% of its energy from renewable sources.

There are some state and federal incentives in my nation for renewable energy and conservation. But these are minimal compared to the excessive oil and coal incentives that have been in place for more than a century and have made America so completely dependent fossil fuels.

This cannot continue.

We need policies that provide more incentives for renewable energy, conservation and efficiency. Such policies will accelerate investment in solar, wind, energy efficiency, and bio fuel technologies. It would also be helpful for world wide adoption of low carbon fuels standards, and fleet efficiency standards.

During a recent conference of the oil and gas industries of China and America in San Francisco I learned that China was considering incentives for the extraction on Coal Bed Methane for energy purposes. Those types of subsidies are certainly better than subsidies for oil and coal, but they still encourage the use of non-renewable energy.

As far back as 1978, I authored a law to provide a tax credit for solar, wind and conservation. It mirrored a similar Federal tax credit. Unfortunately the program lasted only three years. The result was a start up of the renewable industry followed by a collapse, as oil prices fell and the tax credit disappeared. The lesson is clear. All incentive systems must last at least long enough to firmly establish the new energy systems. Twenty years is a good goal.

There are many other market based programs that can and should be used. Of particular importance is the cap and trade system for carbon emissions. The European Union has had a system in place for nearly a decade and this year a new and improved system is in place. California is committed to establish a cap and trade system and we have joined with twenty other states in the U.S. to develop the program. As we develop this plan we must harmonize it to systems already in place so that a world wide trading system can be developed. Such a world wide market will spur rapid reductions in greenhouse gasses and create even more investment and technological innovation.

In California, "clean tech" venture capital investment has doubled over the last two years, bringing the total invested to about \$ 2.9 billion, making California's Silicon Valley the Clean Tech capitol of the world. Venture capitalists are funding research and innovation that will accelerate our ability to capture solar and wind energy and store it for future use, to grow algae that can become bio diesel, and to re-engineer transportation to reduce our dependence on fossil fuel. Government and business support for the research and development of these new sources of energy is essential.

In the business world, thinking green can no longer be a choice when looking toward the future. Smart investors and corporate executives are looking over the horizon and understanding that the risks and opportunity associated with this critical issue must be part of their overall plan to grow their companies.

While California can lead, it can not solve the American problem. My country must shift from last place in the movement to reduce greenhouse gasses to leadership and successful implementation. We must surpass the EU and other signatures to the Kyoto accord. China must do the same.

I am pleased that leaders at the APEC conference addressed this issue. And China is to be congratulated for its recent announcement of its Climate Action Plan that will improve the situation.

But it is not enough.

As the Chinese economy continues to grow, the energy intensity caps that have been announced will actually lead to increased greenhouse gas emissions. President Bush apparently endorsed a similar energy intensity cap, and I can assure you that such a program will lead to increased greenhouse gas emission in the United States.

If the developed world is to ask more from developing nations, developing nations are correct to ask more from the developed world. The United States and other developed nations have an obligation to assist the developing world to reduce greenhouse gases.

We must rapidly increase Clean Development Mechanisms for developing countries, thereby creating incentives for developed nations to invest in clean technology in developing countries.

A world wide carbon cap and trade system will encourage wealthy countries to invest in projects that reduce carbon emissions anywhere in the world. For example, investments in China to re-power existing power plants would accelerate China's efforts to reduce greenhouse gas emissions.

In just a few short weeks from now at the Bali Conference all the world and all our governments have a critical opportunity to advance the solutions to the global climate crisis.

This is a challenge for every human being on this planet. This is not something we can simply brush aside as we have in the past. This is a global issue. This is an issue that cannot be solved without the United States and China leading the way.

Unless our governments in China and America aggressively set in place policies that will dramatically reduce greenhouse gases, our children and our grandchildren will be faced with a very different world. One that is not friendly to human life. A world of more sever storms, more flooding, more drought, disease, starvation, and even war, as hundreds of thousand displaced people migrate to survive. Traditional conflicts will escalate and new ones will break out over scarce land, water, food and energy resources.

But, if we find our way to a new global cooperation, our children and grandchildren will survive and even thrive.

- Lt. Governor Garamendi